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ABSTRACT

This paper explains that Grotberg (1995) has developed two measures of child resilience, one eliciting children's responses to vignettes depicting difficult situations and the second a checklist completed by an adult. Two studies examined the validity of these methods of assessing child resilience. Study 1 focused on the validity of vignettes and used measures of social support and parental bonding as predictors. Sixty-eight students (mean age 12 years) responded to vignettes describing adversities and completed questionnaires on parental bonding and sources of social support. Their teachers completed the resilience checklist. Findings indicated that the single most important predictor of resilience was support from informal sources. Study 2 examined the factor structure of the resilience checklist. Teachers completed the checklist for 40 students (mean age 13 years) and evaluated their school competencies. Students completed the vignette measure and questionnaires assessing their social skills and identifying social supports. Four factors were identified for the resilience checklist, labeled: (1) "I Can"--social/interpersonal resilience, surfacing in school settings; (2) "Facilitative Environment"--internal resilience, emerging within family supports; (3) "I Am"--internal resilience, emerging within nonfamily supports; and (4) "I Have," social skills. The findings of the two studies indicated that the two child resilience measures were significantly related to independent predictors of resilience. (KB)

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Resilience: Development & Measurement

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What is resilience?

Child resilience studies (e.g., Garmezy, 1985; Rutter, 1987; Werner, 1989) have established that **healthy children can thrive in unhealthy settings** in childhood to overcome the potential and actual damaging effects of adversities, traumatic events, and stressful life stressors encountered. Vulnerable children can become resilient and achieve competence in the presence of certain protective or stress-resistant factors and within a supportive environment.

Resilience can be defined as a person's, group's, and community's capacity and will to thrive in unhealthy life situations. A resilient person strives to survive, minimize, and overcome the damaging effects of life's adversities (Grotberg)

Japanese: Tachi naori; Fukugenryoku; Seishin-teki kaifukuryoku
The development of child resilience is one major way to meet education objective of "*ikiru chikara*".

An Eastern philosophical perspective (Taoism) on resilience:
"Achieving a balanced life, letting go, and allowing changes to occur naturally."

How to Study Resilience?

1. Examination of children's responses to problematic situations (**Vignettes**)
2. Identifying the presence/absence of resilience factors in the person (**Checklist**)

Resilience is promoted and developed from learning adaptive responses during exposure to problematic situations in life and nurtured from diversified external social supports and resources to develop internal personal strengths and interpersonal or social skills.

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Resilient children:

"One out of three of these high-risk children grew into competent young adults who loved well, worked well, played well, and expected well."

"The best period to foster resilience is during early childhood"

From Werner (1992; 1984; Werner & Smith, 1982)

Developmental needs of early childhood

Erikson's Psychosocial Stages in childhood:

Age	Crisis	Adequate Resolution
0 - 1.5 yrs	Trust vs. Mistrust	Basic sense of safety, Attachment to parents & others
1.5 - 3.0 yrs	Autonomy vs. Self-doubt	Healthy self perception as agent capable of controlling own body and making things happen
3.0 - 6.0 yrs	Initiative vs. Guilt	Confidence in oneself as initiator, creator; Self worth
6.0 - puberty	Competence vs. inferiority	Adequacy in basic social and intellectual skills

A Developmental Model of Resilience

Most of the major research on resilience that provided a large base of resilience factors (e.g., Werner, 1989; Garmezy, 1985; Rutter, 1987) have *used longitudinal, restropective designs* to study the child in the context of their surroundings, i.e., the family, social group, the school, and the larger community. Another way uses concurrent studies that search for resilient factors in children and adolescents in school settings (Osborn; 1990) or in extreme situations where children become seriously traumatized (CCB, 1995).

Grotberg (1995) *combined retrospective and concurrent approaches* to examine and determine resilience factors in children responding to adversities. It is a unique international study (over 20 countries) that examined what parents, caregivers, or children do (from infancy to age 11 years) that seemed to promote resilience universally. This is indicated by the child's reporting of recent personal stressful experiences occurring in everyday life.

USING RESILIENCE PERSPECTIVE FOR COUNSELING MOTHERS

Resilience in at-risk children is promoted and developed from learning adaptive responses during exposure to problematic situations and nurtured from factors of external supports and resources, internal personal strengths, and interpersonal or social skills (See diagram).

(a) Begin with assessment using the Resilience Checklist. The counselor can teach appropriate resilience skills to students/parents.

(b) Use a solution-focused counseling approach that is beneficial for adolescents with conduct, substance abuse, coping and academic problems.

A resilience focused approach emphasizes the clients perception of the problem and rating of its severity; discovers the clients goal for solving it; uncovers other solution-focused behavior used by the client in the past.

The clients positive experiences and strengths are uncovered to promote their well being.

Establish a weekly trial in which the client practices the solution behaviors. This prepares the client to cope with new problems in their lives.

The counselor develops an approach to enhance a resilient self-concept focused on transferable skills. Suggested techniques:

(a) Role play that assists youths to improve self expression

(b) Conflict resolution techniques that assist clients to work through their interpersonal struggles at home and in school

(c) A nurturing attitude from counselor to convey unconditional love, positive reinforcement, and optimism and hope for the futute

(d) Peer support models

(f) Creative imagery of resilient solutions to past problems and

(g) Bibliotherapy

1. Studying Resilience:

What would resilient children do when faced with these adversities:

The child is at school when an earthquake strikes,
The child going to school is bullied by some older children,
A child sees his father stabbed,
A child's mother has not returned home at the usual time,
A child's parents are separated.

A child's (or a parent's) verbal responses to questions about the situation can demonstrate resilient behavior:

Present a vignette to the child/parent - See below for examples:
What was the situation? Ask the child/parent interviewed:

1. What would you do in the situation?
2. What would you do if the child (or your parent) did that?
3. How would you feel?
4. How does the situation end or how are things now?
5. Can you remember something that happened not so long ago that you did not like or upset you? What was it?

WHAT WAS THE SITUATION?

Situation A

Sonny is three years. He cannot walk because an illness left his legs too weak. He likes to go ou tside tσ build things with some blocks he found. His mother cannot take her outside because she is busy. Sonny starts to cry and begins to throw things at his mother.

(Intent of Resilience: How to stop Sonny's throwing, help him to find something to do. Verbalize understanding of frustration. Later, discuss that throwing is not acceptable and words can be used to express his feelings).

Situation B

Nine year old Reikio walks to school every day and passes a place where a group of older children stand around. When she passes them they call to her, makes fun of her, and sometimes push her. She has become so frightened she refuses to go to school any more and tells her mother she is sick. Her mother knows she is healthy.

(Intent of Resilience: How to find out what is wrong and help Reiko deal with it. Express concern and love. Later, indicate obligation to go to school.)

1. Situation C Chris is seven years old and came to school alone. No one was able to bring him on his first day. He has moved from another town and does not know anyone in his new school. Chris is very frightened as he walks into the school, not knowing what to do or which way to go. Several other young children watch him and begin to talk and laugh among themselves. Chris stops and tears start rolling down his cheeks. A teacher comes out of her classroom and sees the situation.

2. (Intent of Resilience: How to help Chris feel comfortable and stop crying and learn how to deal with the problem. Express feelings of empathy and understanding how he feels. Assure him school will be fine. Find another child to acquaint Chris with school.)

3. The children's responses to the situation is coded for presence/absence of resilience factors.

Present Research:

Two measures of child resilience:

(a) Questions (on actions, behavior, and feelings) presented to children when responding to **vignettes** (situations of adversities), and in reporting a recent personal experience,

(b) **a Checklist** of descriptive statements that requires a response of yes or no to indicate resilience in the child.

The purpose of the present research is to evaluate the assumptions that these two measures have validity in evaluating resilience in terms of known predictors of resilience and tto examine the factorial structure of the resilience factors.

See ***The Resilience Checklist from Grotberg(1995)***

Method

Study 1. Objective: Vignettes as assessment tool of child resilience using measures of social support and parental bonding as predictors.

Sixty-eight schoolchildren (mean age 12.4 years) completed a booklet describing a set of 3 vignettes, and their teachers completed the Resilience Checklist (15-items).

(a) **Vignettes**: Each episode of responses to the vignette was content analyzed using the **Coding Manual** (Grotberg, 1993) to derive four dependent measures. :

i) **General Resilience** (0 = Non-resilient; 1 = Unclear; 2 = Clear resilience) ,

ii) Presence of Interpersonal **Coping Skills** ("I Can"),

iii) Presence of **Inner Strengths** ("I Am"), and

iv) presence of **External Support** / Resources ("I Have").

(See Figure 1)

(b) **Resilience Checklist**: For the Checklist (RC), in this study, since the teachers were less knowledgeable about their students than expected, teachers' responses that identified the *absence* of resilient items were considered more accurate for scoring than items showing their presence.

The total absent characteristics observed by the teachers was computed (**RC-Abs**).

The children also completed questionnaires on :

(c) Parental Bonding (the 25-item **PBI**, by Parker, Tupling, & Brown, 1979) about statements characteristic of their parents on a 4-point Likert scale.

For the PBI, four variables were derived from the student-ratings:

i) Father care (PBI-FC) and

ii) Mother-care (PBI-MC) (e.g. "Affectionate towards me");

iii) Father-overcontrol (PBI-FOC) and

iv) Mother-overprotection (PBI-MOC) (e.g., "Over-protective of me").

(d) Sources of Social Support (the 6-item **SSQ** by Sarason, Sarason, & Pierce; 1987). ("Whom can you really count on to listen when you need to talk").

For the SSQ, 4 variables were derived:

i) Size of family support (SSQFam),

ii) Size of formal social support (SSQFor);

iii) Size of informal support (SSQInf), and

iv) Satisfaction with social support. (SSQSat)

Study 2. Objective: Resilience Checklist and sources of child resilience

Forty schoolchildren (mean age 13.3 years) were identified by their teachers on the basis that they had adequate information about them to complete the **Resilience Checklist** (RC) in terms of identifying accurately for the *presence* of the resilience characteristics.

(a) The teachers observations from the Resilience Checklist were categorized into three sources of resilience and total items summed for each source:

i) Interpersonal Coping Skills (RC-INT),

ii) Inner Strengths (RC-INN), and

iii) External Support/Resources (RC-EXT).

Students completed a booklet describing a set of three **vignettes** and their responses to questions pertaining to each episode were analyzed. For the purpose of this study, student responses were coded only for **general resilience** (GR) and not for sources of resilience.

(b) Teachers also evaluated students school competencies (**HRI**, by Gesten, 1976). The questionnaire has 54 items on a 5-point Likert scale measuring classroom competencies and school adjustment (e.g., "Functions well even with distractions; "Is interested in schoolwork").

(c) The students also completed the **SSQ** to measure the size and sources of their social support (e.g., SSQFamily, SSQInformal, and SSQSize).

Lastly, they completed a a 34-item social skills questionnaire (**SSRS** by Gresham & Elliott, 1990) on a 3-point Likert scale that measured **cooperation, assertion, empathy, and self-control.** For the SSRS, only the total score was used.

Results

Study 1.

Table 1 shows the multiple regression analysis of the four measures of resilience and the predictors using the PBI and SSQ factors.

Significant R-Squares were found for three dependent measures of **resilience derived from the vignette responses**- General Resilience (.36, p .001), Interpersonal Coping Skills (.35, p .001), and Internal-Personal Strengths (.20, p .05).

Partial correlations with **SSQ** indicated that the single most important predictor of all measures of resilience is *social support coming from informal sources* ***(SSQInf)***. Family social support significantly predicted general resilience only. Formal social support ***(SSQFor)*** predicted interpersonal coping skills; and satisfaction with overall social support ***(SSQSat)*** predicted resilience from external or environmental resources.

In addition, the teacher's ratings of absence of resilience (**Resilience Checklist**) predicted a negative relationship with a decrease in interpersonal coping skills as measured from student responses to vignettes (-.23, p .05).

For the sample of adoelscents studied, parental bonding was unrelated to any resilience measure. This confirmed previous research (Hiew & Cormier, 1995) that the **PBI** was significantly related to increase in social skills but not directly to resilience.

See Table 1

Study 2.

Table 2 shows the results of the factor analysis on the **Resilience Checklist** completed by teachers (three measures of resilience RC-Out, RC-Inn, RC-Int) with Vignettes (General Resilience), Social Support (3 sub-scales); Social Skills (SSRC), and School Competencies (HRI). Four factors were extracted by equamax rotation.

Factor 1 accounted for 25 per cent of the variance with higher loadings on **RC-Int** (Interpersonal Coping Skills), General Resilience (Vignettes), HRI, and Social Support Size (SSQSize). Factor 1 is labelled the **"I Can" source of resilience.**

Factor 2 accounted for 17.8 per cent of the variance with higher loadings with **Family Social Support** (SSQFam) and **Social Support Size** (SSQSize) on RC-Inn (Inner Strengths). Factor 2 is labelled the **"Facilitative Environment" source of resilience.**

Factor 3 accounted for 13.8 per cent of the variance with higher loadings on **RC-Inn** (Inner Strengths), Informal Social Support (SSQInf), General Resilience, and Social Support Size (SSQSize). Factor 3 is labelled as the **"I Am"** source of resilience.

Factor 4 accounted for 11.3 per cent of the variance with higher loadings on **RC-Out** (External support/resources) on SSRC (social skills). Factor 4 is labelled as **"I Have".**

Discussion

The results showed that Grotberg's two measures of investigating child resilience are significantly related to independent predictors of resilience such as the sources of social support, school competencies, and social skills. It also appears that there are several sources of resilience related to personal, interpersonal, and enviornmental factors.

Noteworthy is the pairing of each resilience factor with other predictors suggesting that it is the dynamic interaction of multiple factors that foster resilience:

A) General resilience and resilience with a social/interpersonal nature ("I CAN") tend to surface in the presence of external environmental supports and school resources.

B) In the case of internal, personal sources of resilience ("I AM"), they surface with strong family supports as well as with the size of formal and informal social supports.

C) Lastly, teachers' perceptions of students who have more people supportive of them (the "I HAVE" source of resilience) have greater ability in school in terms of competencies to adjust and perform well.

A developmental framework for the study of early childhood resilience to prevent psychopathology and overcome future adversities is warranted.

Understanding Vulnerability and Resilience

(a) Curvilinear Relationship - The Challenge Model of Resilience

(b) The Need for Compensatory and Conditional Models of Resilience

Promotion of Resilience in Schools

Mount Fuji Woodcut Print:

Besides family support, the school and education system have much to contribute to promoting child resilience.

Table 1. Vignettes of adverse situations: Multiple regression analysis of predictors of resilient child responses to Vignettes. (N=68; Mean Age=12.4)

	VIGNETTES: FOUR DEPENDENT MEASURES			
Predictor Variables	**General Resilience**	**Coping Skills "I CAN"**	**Inner Strengths "I AM"**	**External Supports "I HAVE"**
R Square	**.36*****	**.35*****	**.20***	**.16**
Predictors in Equation:	**Partial correlations**	**Partial correlations**	**Partial correlations**	**Partial correlations**
1.RC-Abs	-. 16	**-. 23***	-. 12	-. 04
2.PBI-FC	. 02	-. 06	. 01	-. 02
3.PBI-MC	-. 12	-. 07	-. 03	-. 08
4.PBI-FOC	. 03	. 04	-. 05	. 17
5.PBI-MOC	. 10	. 09	. 09	-. 03
6.SSQSat	. 16	. 12	. 08	**. 23***
7.SSQFam	**.20***	. 07	. 06	. 07
8.SSQFor	. 05	**. 20***	. 14	. 03
9.SSQInf	**. 33*****	**. 34*****	**. 26***	. 20

Notation:

Resilience Checklist:
RC Abs: Resilient factors absent
Parental Bonding Inventory:
PBI FC: Father Care
MC: Mother Care
FOC: Father Over control
MOC: Mother Over protection
Social Support Questionnaire:
SSQSat: Satisfaction with Social Support
SSQFam: Size of Family Support
SSQFor: Size of Formal Support
SSQInf: Size of Informal Support

TABLE 1. Factor analysis (Equamax rotation) of Teacher Checklist of three sources of resilience characteristics with Vignettes and other predictors. (N=40; Mean Age=13.3)

Variable	Factor 1 'I CAN' (SchoolSkills)	Factor 2 'I AM' (Family)	Factor 3 'I AM' (Non-family)	Factor 4 'I HAVE' (Social Skills)
1.GR	**.76**	.01	**.36**	.10
2.SSQFam	-.02	**.92**	-.16	.14
3.SSQInf	.11	-.18	**.77**	-.17
4.SSQSize	**.43**	**.70**	**.31**	-.01
5.**RC-OUT**	-.10	.15	.28	**.79**
6.**RC-INN**	-.02	**.32**	**.61**	.22
7.**RC-INT**	**.78**	.23	.13	-.02
8.SSRC	.15	.00	.27	**.79**
9.HRI	**.60**	.03	.28	.00
Pct Variance	**25.0**	**17.8**	**13.8**	**11.3**

Notation:

Resilience Checklist:
- RC-Out: From External sources
- RC-Inn: From Inner Strengths
- RC-Int: From Intepersonal skills

Vignettes:
- GR : Overall resilience from Vignettes

SSQ:
- SSQFam : Size of social support - Family
- SSQInf : Size of social support - Informal
- SSQSize : Size of social support from all sources

SSRC:
- Social Skills

HRI
- School Competencies, Adjustment

Finding:

The development of resilient responses, school competencies and interpersonal skills to deal with adversities successfully, depend on *multiple resilience factors* that arise from *multiple sources* - such as close family, school, peer groups, and community ties.

Figure 1. Three Sources of Resilience Factors

1. **External Supports and Resources** 1.1 Trusting relationships; 1.2 Access to Health, Edn, Welfare, & Security services; 1.3 Emotional support outside the family; 1.4 Structure and rules at home; 1.5 Parental encouragement of autonomy; 1.6 Stable school environment; 1.7 Stable home environment; 1.8 Role model 1.9 Religious organization
2. **Internal, personal strengths** 2.1Sense of beinglovable; 2.2 Autonomy; 2.3 Appealing temperament; 2.4 Achievement oriented; 2.5Self-esteem; 2.6 Hope, faith, belief in a Higher Being, morality, trust; 2.7Altruism, empathy; 2.8 Locus of control.
3. **Social, interpersonal skills** 3.1 Creativity; 3.2 Persistence; 3.3 Humor; 3.4 Communication; 3.5 Problem solving; 3.6 Impulse control; 3.7Seeks trusting relationship; 3.8 Social skills; 3.9 Intellectual skill

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